

What is claimed is:

1. A pump, in particular a vane cell pump or a roller cell pump, the vane cell pump or roller cell pump having a double-stroke contour ring and a rotor in which vanes or rollers are radially displaceably mounted, having at least one side plate which seals the rotary cell group, having a housing and a housing cover, the rotor being driven by a shaft and the shaft being supported in the housing and possibly in the cover, wherein the stroke ring and the at least one side plate are positioned with respect to one another using at least one first pin, and the first pin not passing through the at least first side plate.
2. The pump, in particular as recited in Claim 1, wherein the at least one side plate and the housing or the housing cover are positioned with respect to one another by a second pin, the second pin not passing through the at least one side plate and the second pin having no contact with the contour ring.
3. The pump, in particular as recited in Claim 1 or Claim 2, wherein a second side plate and the housing or the cover are positioned with respect to one another by a third pin, the third pin not passing through the second side plate and the third pin having no contact with the contour ring.
4. The pump, in particular as recited in one of the preceding claims, wherein the first pin and the second pin and possibly the third pin are situated in the same through orifice, but in different components.
5. The pump, in particular as recited in one of the preceding claims, wherein the first pin and the second pin and possibly the third pin each protrude approximately into the middle of the side plate thickness.
6. The pump, in particular as recited in one of the preceding claims, wherein the first pin and the second pin and possibly the third pin are situated in a

“precision drill hole” so that the pins together represent a “precision pin connection” in a round hole.

7. The pump, in particular as recited in one of the preceding claims,
wherein a second through orifice is implemented in the side plates, in the contour ring, in the housing or in the cover, this second orifice being designed as an elongated hole in the side plates and as a round hole in the cover or in the housing and in the contour ring, a fourth pin and a fifth pin being situated in the elongated hole, the fourth pin being designed and situated in principle as the first pin, and the fifth pin being designed and situated in principle as the second pin.
8. The pump, in particular as recited in one of the preceding claims,
wherein the drill holes are smooth throughout (i.e., they do not have any shoulders), so that the pins are only subjected to shearing stress and not to bending stress.
9. The pump, in particular as recited in one of the preceding claims,
wherein the two pins in the cover (the second pin and the fifth pin) and the third pin in the housing have the same length and the same diameter.
10. The pump, in particular as recited in one of the preceding claims,
wherein the two pins in the stroke ring (the first pin and the fourth pin) have the same length and the same diameter.
11. The pump, in particular as recited in one of the preceding claims,
wherein the second pin, the third pin, and the fifth pin have a diameter which is different from that of the first pin and the fourth pin and the holes therefore have a stepped design.
12. The pump, in particular as recited in one of the preceding claims,
wherein the housing has a pot shape.

13. The pump, in particular as recited in one of the preceding claims,
wherein the rotary cell group is fixed on the cover.
14. The pump, in particular as recited in one of the preceding claims,
wherein the shaft is additionally supported in the cover.
15. A pump, in particular a vane cell pump or a roller cell pump, the vane cell pump or
roller cell pump having a double-stroke contour ring and a rotor in which vanes or
rollers are radially displaceably mounted, having at least one side plate which seals the
rotary cell group, having a housing and a housing cover, the rotor being driven by a
shaft and the shaft being supported in the housing and possibly in the cover,
characterized by at least one feature according to the present invention disclosed in the
application documents.